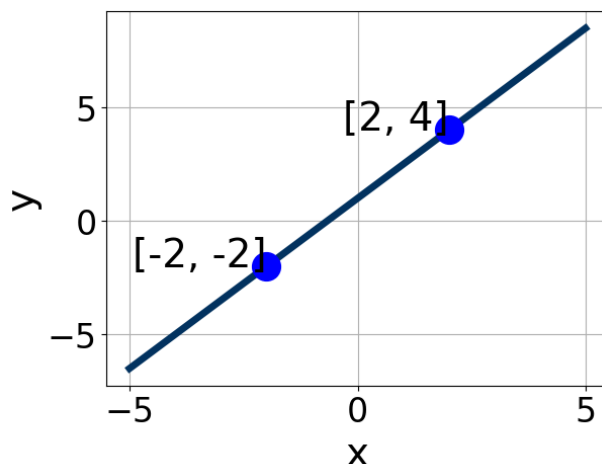


1. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$(6, -9)$ and $(4, 3)$

- A. $m \in [-6, -2]$ $b \in [-16, -9]$
B. $m \in [-6, -2]$ $b \in [-2, 1]$
C. $m \in [-6, -2]$ $b \in [-29, -22]$
D. $m \in [-6, -2]$ $b \in [24, 31]$
E. $m \in [2, 10]$ $b \in [-25, -20]$
-

2. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [2.84, 4.64]$, $B \in [-2.32, -1.44]$, and $C \in [-2.02, -1.52]$
B. $A \in [-4.01, -2.79]$, $B \in [1.7, 2.01]$, and $C \in [1.22, 3.88]$
C. $A \in [2.84, 4.64]$, $B \in [1.7, 2.01]$, and $C \in [1.22, 3.88]$
D. $A \in [-2.92, -1.26]$, $B \in [0.95, 1.02]$, and $C \in [0.78, 1.69]$
E. $A \in [-2.92, -1.26]$, $B \in [-1.83, -0.44]$, and $C \in [-1.05, -0.64]$
-

3. Solve the equation below. Then, choose the interval that contains the solution.

$$-10(12x + 9) = -18(-19x + 17)$$

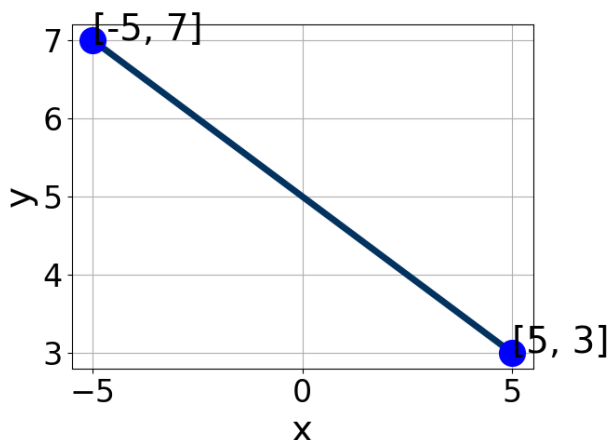
- A. $x \in [-1.03, -0.42]$
 - B. $x \in [0.43, 0.78]$
 - C. $x \in [1.1, 2.23]$
 - D. $x \in [0.6, 1.61]$
 - E. There are no real solutions.
-

4. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$$(11, -5) \text{ and } (-3, 11)$$

- A. $m \in [0.14, 4.14]$ $b \in [14.22, 14.87]$
 - B. $m \in [-3.14, 0.86]$ $b \in [-16.3, -15.83]$
 - C. $m \in [-3.14, 0.86]$ $b \in [13.94, 14.32]$
 - D. $m \in [-3.14, 0.86]$ $b \in [-7.96, -7.54]$
 - E. $m \in [-3.14, 0.86]$ $b \in [7.19, 8.06]$
-

5. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [-1.7, 0.9]$, $B \in [-2.32, -0.17]$, and $C \in [-7, -3]$
 B. $A \in [1.6, 3.1]$, $B \in [-7.51, -4.95]$, and $C \in [-29, -23]$
 C. $A \in [-1.7, 0.9]$, $B \in [0.43, 2.07]$, and $C \in [1, 12]$
 D. $A \in [1.6, 3.1]$, $B \in [4.1, 5.67]$, and $C \in [24, 31]$
 E. $A \in [-2.6, 0.2]$, $B \in [-7.51, -4.95]$, and $C \in [-29, -23]$

6. Solve the equation below. Then, choose the interval that contains the solution.

$$-12(11x - 16) = -8(-14x - 6)$$

- A. $x \in [-0.09, 0.98]$
 B. $x \in [0.87, 0.99]$
 C. $x \in [11.94, 12.19]$
 D. $x \in [-1.3, -0.55]$
 E. There are no real solutions.

7. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{4x + 5}{5} - \frac{-3x - 8}{2} = \frac{-7x + 3}{8}$$

- A. $x \in [-0.38, 0.07]$

- B. $x \in [-4.29, -2.18]$
 - C. $x \in [-2.82, -1.42]$
 - D. $x \in [0.98, 1.57]$
 - E. There are no real solutions.
-

8. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Perpendicular to $8x - 9y = 9$ and passing through the point $(-9, 4)$.

- A. $m \in [-1.33, -0.98]$ $b \in [5.49, 6.27]$
 - B. $m \in [-0.99, -0.73]$ $b \in [-6.39, -4.95]$
 - C. $m \in [-1.33, -0.98]$ $b \in [12.5, 13.4]$
 - D. $m \in [0.85, 1.49]$ $b \in [13.67, 14.79]$
 - E. $m \in [-1.33, -0.98]$ $b \in [-6.39, -4.95]$
-

9. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{4x + 5}{7} - \frac{8x + 7}{5} = \frac{-3x + 6}{4}$$

- A. $x \in [-3.19, -1.19]$
 - B. $x \in [1.21, 3.21]$
 - C. $x \in [-9.85, -4.85]$
 - D. $x \in [-30.72, -27.72]$
 - E. There are no real solutions.
-

10. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Parallel to $8x - 9y = 15$ and passing through the point $(4, 9)$.

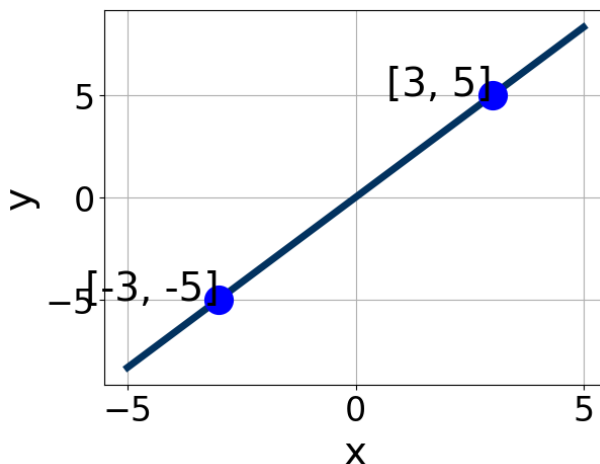
- A. $m \in [0.72, 0.92]$ $b \in [-8.4, -4]$
 - B. $m \in [1.09, 1.37]$ $b \in [5.2, 5.7]$
 - C. $m \in [0.72, 0.92]$ $b \in [5.2, 5.7]$
 - D. $m \in [-0.94, -0.66]$ $b \in [11.2, 13.6]$
 - E. $m \in [0.72, 0.92]$ $b \in [2.2, 5.3]$
-

11. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$(5, -9)$ and $(-3, 11)$

- A. $m \in [-5.5, 1.5]$ $b \in [-4.5, 2.5]$
 - B. $m \in [-5.5, 1.5]$ $b \in [-15, -13]$
 - C. $m \in [-5.5, 1.5]$ $b \in [2.5, 4.5]$
 - D. $m \in [1.5, 6.5]$ $b \in [14.5, 23.5]$
 - E. $m \in [-5.5, 1.5]$ $b \in [14, 16]$
-

12. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [-6, -2]$, $B \in [2, 3.6]$, and $C \in [-2, 3]$

- B. $A \in [-1.67, 2.33]$, $B \in [-1.5, -0.4]$, and $C \in [-2, 3]$
- C. $A \in [-1.67, 2.33]$, $B \in [0, 2.7]$, and $C \in [-2, 3]$
- D. $A \in [4, 7]$, $B \in [-3.9, -2.5]$, and $C \in [-2, 3]$
- E. $A \in [4, 7]$, $B \in [2, 3.6]$, and $C \in [-2, 3]$
-

13. Solve the equation below. Then, choose the interval that contains the solution.

$$-8(-2x - 18) = -19(-9x + 12)$$

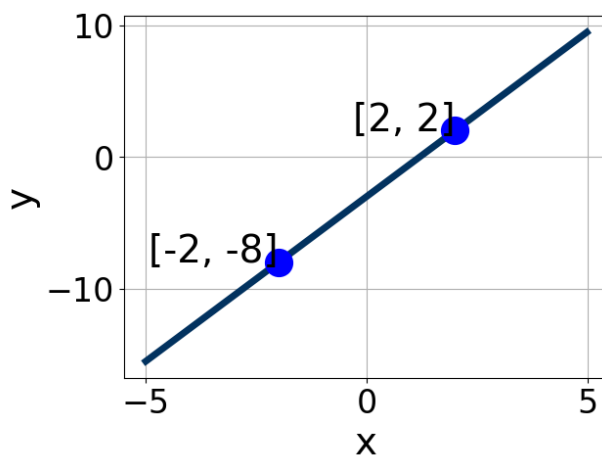
- A. $x \in [0.54, 0.65]$
- B. $x \in [2.15, 2.72]$
- C. $x \in [-0.7, -0.54]$
- D. $x \in [0.23, 0.52]$
- E. There are no real solutions.
-

14. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$$(-8, 5) \text{ and } (6, -3)$$

- A. $m \in [-1.48, 0.27]$ $b \in [12.66, 13.75]$
- B. $m \in [0.51, 0.74]$ $b \in [-7.37, -5.63]$
- C. $m \in [-1.48, 0.27]$ $b \in [-0.63, 0.31]$
- D. $m \in [-1.48, 0.27]$ $b \in [0.36, 0.67]$
- E. $m \in [-1.48, 0.27]$ $b \in [-9.97, -8.7]$
-

15. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [-2.6, 1.8]$, $B \in [-1.74, -0.89]$, and $C \in [1.8, 4]$
B. $A \in [2.5, 8.3]$, $B \in [1.11, 2.52]$, and $C \in [-7.9, -4.8]$
C. $A \in [2.5, 8.3]$, $B \in [-2.09, -1.79]$, and $C \in [4.8, 8]$
D. $A \in [-5.1, -3.2]$, $B \in [1.11, 2.52]$, and $C \in [-7.9, -4.8]$
E. $A \in [-2.6, 1.8]$, $B \in [-0.04, 1.53]$, and $C \in [-5.2, -2.6]$

-
16. Solve the equation below. Then, choose the interval that contains the solution.

$$-14(-15x - 6) = -3(18x - 12)$$

- A. $x \in [0.31, 0.74]$
B. $x \in [-1.04, -0.76]$
C. $x \in [-0.27, -0.14]$
D. $x \in [-0.53, -0.33]$
E. There are no real solutions.

-
17. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-3x + 8}{2} - \frac{-8x - 7}{3} = \frac{9x + 6}{4}$$

- A. $x \in [7.9, 9]$

- B. $x \in [4.4, 5.4]$
 - C. $x \in [0.6, 2]$
 - D. $x \in [0, 0.4]$
 - E. There are no real solutions.
-

18. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Parallel to $6x + 7y = 12$ and passing through the point $(10, -4)$.

- A. $m \in [0.16, 1.19]$ $b \in [-13.13, -12.4]$
 - B. $m \in [-1.07, -0.35]$ $b \in [2.89, 5.54]$
 - C. $m \in [-1.07, -0.35]$ $b \in [-6.03, -3.72]$
 - D. $m \in [-1.26, -1.1]$ $b \in [2.89, 5.54]$
 - E. $m \in [-1.07, -0.35]$ $b \in [-14.4, -13.93]$
-

19. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{4x + 9}{3} - \frac{4x - 4}{7} = \frac{9x + 6}{8}$$

- A. $x \in [4.62, 5.62]$
 - B. $x \in [18.28, 21.28]$
 - C. $x \in [-1.69, 2.31]$
 - D. $x \in [4.77, 8.77]$
 - E. There are no real solutions.
-

20. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Perpendicular to $5x - 7y = 7$ and passing through the point $(6, 10)$.

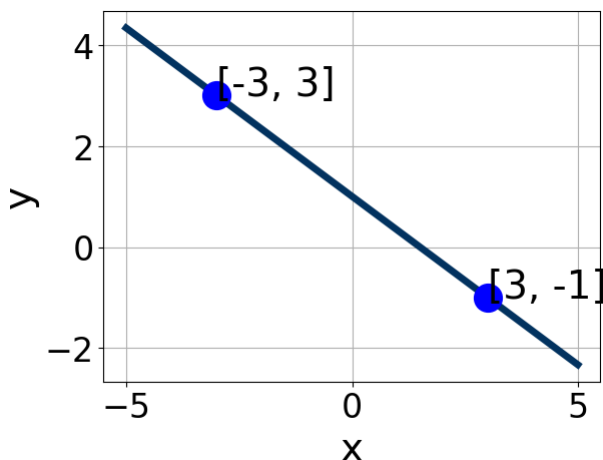
- A. $m \in [-2.2, -1.21]$ $b \in [3, 8]$
 - B. $m \in [-1.13, -0.18]$ $b \in [18.4, 19.4]$
 - C. $m \in [1.05, 1.97]$ $b \in [0.6, 2.6]$
 - D. $m \in [-2.2, -1.21]$ $b \in [18.4, 19.4]$
 - E. $m \in [-2.2, -1.21]$ $b \in [-21.4, -16.4]$
-

21. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$(-9, 6)$ and $(-8, 10)$

- A. $m \in [3, 9]$ $b \in [14, 16]$
 - B. $m \in [3, 9]$ $b \in [-42, -40]$
 - C. $m \in [-9, 3]$ $b \in [-24, -18]$
 - D. $m \in [3, 9]$ $b \in [39, 43]$
 - E. $m \in [3, 9]$ $b \in [16, 22]$
-

22. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [0.9, 2.82]$, $B \in [2.1, 3.2]$, and $C \in [2.9, 4.18]$

- B. $A \in [-0.75, 0.8]$, $B \in [-0.9, 2.3]$, and $C \in [0.89, 1.33]$
C. $A \in [-0.75, 0.8]$, $B \in [-1.2, 0.9]$, and $C \in [-1.63, -0.12]$
D. $A \in [0.9, 2.82]$, $B \in [-4.5, -2.4]$, and $C \in [-3.28, -2.97]$
E. $A \in [-3.19, -0.91]$, $B \in [-4.5, -2.4]$, and $C \in [-3.28, -2.97]$
-

23. Solve the equation below. Then, choose the interval that contains the solution.

$$-12(7x - 2) = -6(-14x + 16)$$

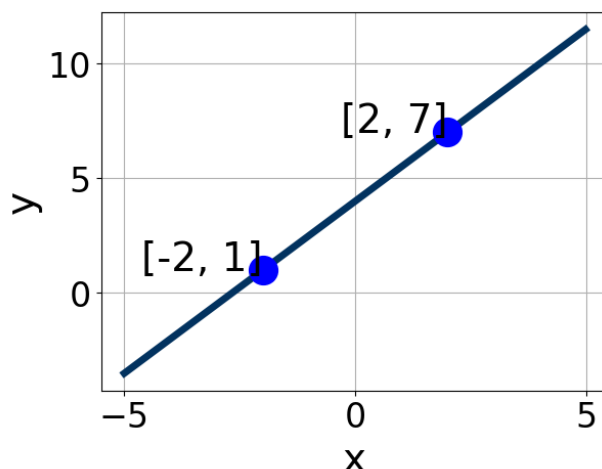
- A. $x \in [-0.59, -0.33]$
B. $x \in [0.38, 0.58]$
C. $x \in [0.67, 0.89]$
D. $x \in [-0.24, 0]$
E. There are no real solutions.
-

24. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$$(-9, -5) \text{ and } (-10, -7)$$

- A. $m \in [1.7, 4.1]$ $b \in [11.7, 15.01]$
B. $m \in [1.7, 4.1]$ $b \in [3.34, 5.29]$
C. $m \in [1.7, 4.1]$ $b \in [-13.21, -12.4]$
D. $m \in [-3, -1.1]$ $b \in [-28.17, -26.87]$
E. $m \in [1.7, 4.1]$ $b \in [1.52, 3.14]$
-

25. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [-2.07, -1.15]$, $B \in [-1.44, -0.95]$, and $C \in [-5.5, -3.4]$
 B. $A \in [-3.29, -2.8]$, $B \in [1.96, 2.69]$, and $C \in [7.3, 10.1]$
 C. $A \in [1.55, 3.68]$, $B \in [1.96, 2.69]$, and $C \in [7.3, 10.1]$
 D. $A \in [1.55, 3.68]$, $B \in [-2.26, -1.9]$, and $C \in [-8.9, -7.4]$
 E. $A \in [-2.07, -1.15]$, $B \in [0.54, 1.34]$, and $C \in [3.4, 5.6]$

26. Solve the equation below. Then, choose the interval that contains the solution.

$$-15(8x + 3) = -9(14x - 6)$$

- A. $x \in [-2.8, -0.5]$
 B. $x \in [-1.2, 0.1]$
 C. $x \in [0.5, 2.6]$
 D. $x \in [15.7, 17.6]$
 E. There are no real solutions.

27. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-4x + 7}{8} - \frac{7x + 3}{5} = \frac{-6x - 3}{4}$$

- A. $x \in [16.5, 19.5]$

- B. $x \in [0.2, 2.2]$
 - C. $x \in [5.56, 8.56]$
 - D. $x \in [1.56, 4.56]$
 - E. There are no real solutions.
-

28. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Parallel to $5x - 8y = 12$ and passing through the point $(-4, -3)$.

- A. $m \in [0.74, 3.04]$ $b \in [-1.67, 0.09]$
 - B. $m \in [-0.16, 0.63]$ $b \in [0.59, 1.56]$
 - C. $m \in [-2.11, -0.52]$ $b \in [-5.65, -5.1]$
 - D. $m \in [-0.16, 0.63]$ $b \in [-0.06, 0.58]$
 - E. $m \in [-0.16, 0.63]$ $b \in [-1.67, 0.09]$
-

29. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{6x - 7}{7} - \frac{-3x + 9}{5} = \frac{3x - 3}{8}$$

- A. $x \in [11.3, 13.9]$
 - B. $x \in [-0.4, 2]$
 - C. $x \in [2, 2.9]$
 - D. $x \in [-1.2, -0.9]$
 - E. There are no real solutions.
-

30. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Perpendicular to $7x - 4y = 8$ and passing through the point $(-3, 2)$.

- A. $m \in [-0.5, 0.9]$ $b \in [3.52, 4.84]$
 - B. $m \in [-1.11, 0.04]$ $b \in [4.56, 5.52]$
 - C. $m \in [-2.96, -0.9]$ $b \in [0.2, 0.5]$
 - D. $m \in [-1.11, 0.04]$ $b \in [-0.97, 0.16]$
 - E. $m \in [-1.11, 0.04]$ $b \in [0.2, 0.5]$
-